FROM (NAME & LOCATION): E. S. Tucker - Technology Department - South Second Street

DATE: August 6, 1970

SUBJECT: PCB CONTENT OF CHOCCOLOCCO CREEK FISH

REFERENCE:

cc: M. W. Farrar - Res. 1
R. E. Keller - Res. 1
E. P. Wheeler - GO
J. T. Garrett - GO
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P. B. Hodges - GO

TO: W. B. Papageorge
General Offices

During the October 1969 semi-annual survey of the Choccolocco Creek, a number of fish were collected, quick frozen, and shipped to us for PCB residue analysis. The results of our analysis of these samples for PCB's are shown in the table accompanying this memo.

Selected extracts were also submitted for GC/Mass verification of our findings. The results of the GC/Mass analysis are also shown in the table.

A few select extracts, high in PCB's, will also be screened for polychlorinated terphenyls (PCT's) by GC/Mass.

E. S. Tucker

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Attach.

The information contained in this write-up is, to our best knowledge, true and accurate, but all recommendations and suggestions are made without guarantee, since the conditions of use are beyond our control. The Monsanto Company disclaims any liability incurred in connection with the use of these procedures, data or suggestions.

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TABLE 1

Family and Species	Common Name	Number in Composite Sample	ppm PCB's Calculated as Aroclor 1254 Wet Weight	ppm PCB's Calculated as Aroclor 1254 Lipid	% Lipid	OR Log Number
Choccolocco Creek @ Hwy 78 Bridge (Station #4), ~3 mi. above confluence with Snow Creek						
Clupeidae-Herring						
Dorosoma cepedianum	Gizzard Shad	4	77.7	1240	6.4	252
		6	29.3	798	3.7	279
Catostomidae-Suckers						
Hypentelium etowanum	Alabama Hogsucker	3	2.23	138	1.6	275
Cyprinidea-Minnows						
Notemigonus crysoleucas	Golden Shiner	1	0.45	79.4	0.6	270
Notropis venustus	Blacktail Shiner	3	-	16.5	-	269
Centrarchidae-Sunfishes						
Lepomis cyanellus	Green Sunfish	5	0.45	127	1.4	271
Lepomis macrochirus	Bluegill	1	1.12	43.2	2.6	272
Lepomis macrochirus	Bluegill	24	16.0	1170	1.4	278*
Lepomis macrochirus	Bluegill	2	0.28	27.9	1.0	273
Lepomis megalotis	Longear Sunfish	7	61.9	4260	1.5	280*
Lepomis microlophus	Redear Sunfish	2	-	308	-	266*
Lepomis microlophus	Redear Sunfish	6	0.79	199	0.4	277
Microterus salmoides	Largemouth Bass	4	2.73	273	1.0	276
Pomoxis nigromaculatus	Black Crappie	6	3.20	361	0.9	281
		2	2.44	176	1.4	274
Cattidae-Sculpins						
Cottus carolinae	Banded Sculpin	5	-	57.5	-	265
	Crayfish	4	1	1.50	-	267
	Snails	5	-	44.4	-	268
Choccolocco Creek @ Hwy 21 Bridge (Station #5) ~1 mi. below confluence with Snow Creek						
	Tadpole	1	1	9540	-	264
Choccolocco Creek @ Hwy 95 Bridge, ~7-8 mi. below confluence with Snow Creek						
Cyprinidae-Minnows						
Campostoma anomalum	Stoneroller	3	630	4520	13.9	253*
Notropis venustus	Blacktail Shiner	3	1097	37800	2.9	254

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TABLE 1

Family and Species	Common Name	Number in Composite Sample	ppm PCB's Calculated as Aroclor 1254 Wet Weight	ppm PCB's Calculated as Aroclor 1254 Lipid	% Lipid	OR Log Number
Choccolocco Creek @ Hwy 95 Bridge, ~7-8 mi. below confluence with Snow Creek (continued)						
Centrarchidae-Sunfishes						
Chaenobryttus culosus	Warmouth	1	128	17590	0.7	258
Lepomis cyanellus	Green Sunfish	6	-	7970	-	259
Micropterus salmoides	Largemouth Bass	1	684	9720	7.0	257
	Frogs	2	323	4700	0.5	260*
Choccolocco Creek @ Hwy 109 Bridge, ~15 mi. below confluence with Snow Creek						
Cyprinidae-Minnows						
Carassius auratus	Goldfish	1	307	4290	7.2	263
Notemigonus crysoleucas	Golden Shiner	3	170	3920	4.3	262
Notropis venustus	Blacktail Shiner	4	176	2390	7.3	261*
Choccolocco Creek @ Hwy 190 Bridge						
	Snails	20	25.1	6610	0.4	255*

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*Analyzed by GC/Mass
PCB's detected in 253, 261, 280
None detected in 260, 266, 278, 255

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